

Russell D. Lukas  
8300 Greensboro Dr.  
Suite 1200  
Tysons, VA 22102

rlukas@fcclaw.com  
(703) 584-8660  
WWW.FCCLAW.COM

LLGS | LUKAS  
LAFURIA  
GUTIERREZ  
& SACHS LLP

August 25, 2020

Elizabeth Mumaw, Chief  
Spectrum Enforcement Division  
Enforcement Bureau  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re Phonetone Technology Co., Ltd.  
1015, Floor 10, Area C, Zhan Tao Science & Technology Building  
Longhua New District, Shenzhen  
China

Dear Ms. Mumaw:

This complaint is filed on behalf of our client, Wilson Electronics, LLC (“Wilson”), which has discovered that Phonetone Technology Co., Ltd. (“Phonetone”) is marketing consumer signal boosters (“CSBs”) in the United States in violation of § 302(b) of the Communications Act of 1934, as amended (“Act”), 47 U.S.C. § 302(b), and §§ 2.803(b)(1), 15.1(c), and 20.21(g) of the Commission’s rules (“Rules”), 47 C.F.R. §§ 2.803(b)(1), 15.1(c), 20.21(g).

### Background

Wilson has been a leading advocate for CSBs and was one of the industry architects of the regulatory framework of § 20.21 of the Rules.<sup>1</sup> Wilson filed one of the three petitions for rulemaking that led the Commission to open WT Docket No. 10-4. Subsequently, it was among the five industry stakeholders that proposed a set of rules that would apply to all CSBs that included the two “safe harbors” that formed the basis of the Commission’s Network Protection Standard (“NPS”).<sup>2</sup> Most recently, it was Wilson’s petition for a further rulemaking that eventually led the Commission to propose extending the signal booster program to additional spectrum bands and lifting the personal use restriction on wideband CSBs.<sup>3</sup>

---

<sup>1</sup> Wilson and its subsidiaries, weBoost LLC and zBoost LLC, are leaders in the wireless communications industry, and have designed and manufactured cellular signal boosters, antennas and related components for more than 20 years.

<sup>2</sup> See *Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission’s Rules to Improve Wireless Coverage Through the Use of Signal Boosters*, 28 FCC Rcd. 1663, 1668 (¶ 11) (2013) (“*Report and Order*”).

<sup>3</sup> See *Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Rules to Improve Wireless Coverage Through the Use of Signal Boosters*, 33 FCC Rcd. 3334, 3347 (¶ 37) (2018) (“*Second FNPRM*”).

Wilson has been forced to compete in the CSB market with Chinese manufacturers that illegally market wideband CSBs through Amazon.com or Amazon Services (“Amazon”) that do not comply with the NPS, are not properly labelled, and have not been granted equipment authorization by the Commission. Beginning in May 2016, Wilson has notified Amazon of the unlawful CSBs that it was offering for sale on its website. In some instances, Amazon terminated the listings for the illegal products. In others, Amazon continued to allow the marketing of the non-compliant CSBs. In particular, Phonetone has been allowed to continue to sell unlawful wideband CSBs through Amazon.

Phonetone should be well known to the Commission as a rule violator. In July 2017, Wilson provided the Commission’s Office of Engineering and Technology (“OET”) with a list of the unlawful signal boosters that Phonetone was selling through Amazon. The OET subsequently rescinded four equipment authorizations for industrial signal boosters having determined that Phonetone was actually selling unauthorized CSBs.

The Commission has authorized the use of CSBs in the wireless radio service spectrum bands that were being used for the provision of commercial wireless services Cellular (824-849 MHz and 869-894 MHz), Broadband PCS (1850-1915 MHz and 1930-1995 MHz), AWS-1 (1710-1755 MHz and 2110-2155 MHz), 700 MHz Lower A through E (698-746 MHz) and Upper C (746-757 MHz and 776-787 MHz) Blocks, and 800 MHz Enhanced Specialized Mobile Radio (ESMR) (817-824 MHz and 862-869 MHz). *See Report and Order*, 28 FCC Rcd. at 1677-79 (¶¶ 36-40). Accordingly, § 20.21(e)(3) of the Rules provides:

[CSBs] must be designed and manufactured such that they only operate on the frequencies used for the provision of subscriber-based services under parts 22 (Cellular), 24 (Broadband PCS), 27 (AWS-1, 700 MHz Lower A–E Blocks, and 700 MHz Upper C Block), and 90 (Specialized Mobile Radio) of this chapter.<sup>4</sup>

Wilson purchased and examined two CSBs manufactured by Phonetone – the 7-Band Booster (Model AN-USF7) and the Band 66/4 Booster (Model AN-B66-65) – and confirmed that they operate unlawfully in frequency bands where the Commission has not authorized the operation of CSBs. Thus, they do not comply with § 20.21(e)(3) of the Rules.

### 7-Band Booster

Attachment 1 hereto is a screenshot of the Amazon listing of the Phonetone 7-Band Booster on July 27, 2020. As you can see, the 7-Band Booster was marketed on Amazon as a “5G 7-Band Cell Phone Signal Booster for Home Office and Cabin - Mobile Cellular Repeater Kit Boosts All Carriers 5G 4G LTE 3G Signal for Multiple Users Up to 5,000Sq Ft.” Attach. 1 at 1. It was described as follows:

**【Compatible with All US Networks】** - 7 bands booster supports All U.S. Carriers  
All Signal Type 5G/4G/3G/2G for Verizon, AT&T, T-Mobile, Straight Talk, US

---

<sup>4</sup> 47 C.F.R. § 20.21(e)(3).

Cellular and Sprint etc, works with all cellular devices operating on Band 71, 12/17, 13, 26/5, 66/4, 25/2, 30. (600/700/850/1700/1900/2100/2300MHz).<sup>5</sup>

I have attached photographs of the front and back of the Phonetone 7-Band Booster (Attachs. 2 and 3 hereto), as well as a copy of the user manual that came with the device (Attach. 4). You will note that Phonetone labeled its 7-Band Booster as a CSB. *See* Attach. 3. Note also that there are gain adjustment dials on the front of the device for 600 MHz (Band 71), 1700 MHz (Band 66), and 2300 MHz (Band 30). *See* Attach. 2; Attach. 4 at 14. Phonetone unquestionably designed and manufactured the 7-Band Booster to operate in spectrum bands that include bands 71 (617-652 MHz and 663-698 MHz), 66 (1710-1780 MHz and 2110-2200 MHz), and 30 (2305-2315 MHz and 2350-2360 MHz). *See* Attach. 1 at 5; Attach. 4 at 14.

Obviously, the Commission has not authorized the use of CSBs in bands 71 and 30. *See* 47 C.F.R. § 20.21(e)(3). And it has only authorized the use of CSBs in the AWS-1 (1710-1755 MHz and 2110-2155 MHz) portion of band 66. *See id.* Clearly, Phonetone violated § 20.21(e)(3) of the Rules, and the Commission's NPS,<sup>6</sup> when it manufactured its 7-Band Booster.

In 2018, the Commission specifically sought comment on whether it should authorize the use of CSBs in the 600 MHz (617-652 MHz and 663-698 MHz), WCS (2305-2320 MHz and 2345-2360 MHz), and BRS/EBS (2495-2690 MHz) bands. *See Second FNPRM*, 33 FCC Rcd. at 3342 (¶ 24). AT&T and others strenuously objected to the use of CSBs in 2.3 GHz WCS spectrum. To date, the Commission has not authorized the use of CSBs in any new spectrum bands. Nevertheless, Phonetone produced its 7-Band Booster to operate in the 600 MHz and WCS bands.

A CSB “can only be certificated ... if it complies with all applicable rules in this subpart and all technical rules for the frequency band(s) of operation...” 47 C.F.R. § 20.21(e)(2)(i). Because Phonetone's 7-Band Booster does not comply with § 20.21(e)(3) of the Rules, it cannot be certificated. In any event, it appears that Phonetone never obtained an equipment authorization for its 7-Band Booster.

The label on the back of the 7-Band Booster gives its FCC ID number as 2ALZEUSF7. *See* Attach. 3. The FCC ID number 2ALZEUSF7 was not found in the FCC's equipment authorization database. In fact, all FCC ID numbers obtained by Phonetone begin with the grantee code YYO. Thus, it appears that the FCC ID number 2ALZEUSF7 is bogus. Intentionally marketing and selling the 7-Band Booster under a false FCC ID number is a clear instance of fraud by Phonetone.

At the same time Phonetone was selling the 7-Band Booster under its own name, the identical booster was marketed by Anntlent Technology Co., Ltd (“Anntlent”), which shares Phonetone's address at 1015, Floor 10, Area C, Zhan Tao Science & Technology Building. *See* Attach. 5 at 1; Attach. 6 at 2. In addition, the 7-Band Booster was being sold by an entity by the name of “Anycall,” which also has its offices at 1015, Floor 10, Area C, Zhan Tao Science & Technology Building. *See* Attach. 7 at 1; Attach. 8 at 2. That Anntlent and Anycall are affiliated

---

<sup>5</sup> Attach. 1 at 1.

<sup>6</sup> *See* 47 C.F.R. § 20.21(e).

with Phonetone is further established by the fact that all three employ virtually identical terms and conditions which constitute a contract with “Phonetone Tech Booster.” *Compare* Attach. 9 at 1, 2 *with* Attach. 10 at 1, 3, Attach. 11 at 1, 2.

On July 27, 2020, the same 7-Band Booster was listed on Amazon as being sold by three different companies, each with a different Amazon Standard Identification Number (“ASIN”), as shown below.<sup>7</sup>

Brand	Model	ASIN
Phonetone	PH-USF7-PPW-K1	B087CPNWML
Anntlent	AN-USF7-POW-K3	B087CNK7K9
Anycall	N/A	B087CQVLV6

After Wilson notified Amazon that the so-called Phonetone, Anntlent, and Anycall 7-band boosters were illegal, the Amazon listings for the boosters were changed significantly. As of August 11, 2020, the 7-Band Booster was no longer being offered by Anycall. Rather, the 7-band booster was being sold on Amazon by Phonetone (Attach. 12), Anntlent (Attach. 13), Orpey Ltd. (“Orpey”) (Attach. 14), and “Proutone” or Protone Ltd. (“Proutone”) (Attach. 15). Now, the 7-band booster is advertised as operating in five frequency bands (2, 4, 5, 12/17, and 13),<sup>8</sup> but all four “brands” have gain adjustment dials for bands 71, 66, and 30.<sup>9</sup> And the Phonetone 7-Band Booster has a new model number and ASIN.<sup>10</sup> The following table shows how the same booster was listed on Amazon on August 11, 2020.<sup>11</sup>

Brand	Model	ASIN
Phonetone	PH-USF7-PYW-K4	B087CXZWC8
Anntlent	AN-USF7-POW-K3	B087CNK7K9
Orpey	N/A	B087CQ1FVF
Proutone	N/A	B087JJ2CW6

It appears that Wilson was successful in having Amazon terminate its listing of Phonetone’s patently illegal 7-Band Booster only to have the manufacturer turn around and market the same unlawful device under new brand names with new product descriptions. The ease by which Phonetone continues to sell the same illegal CSB over the Internet demonstrates the manifest need for the Commission to take drastic enforcement action.

#### Band 66/4 Booster

I have also attached a screenshot of the Amazon listing for Phonetone’s Band 66/4 Booster

---

<sup>7</sup> See Attach. 1 at 6; Attach. 5 at 4; Attach. 7 at 3.

<sup>8</sup> See Attach. 12 at 4; Attach. 13 at 1, 5; Attach. 14 at 3; Attach. 15 at 1.

<sup>9</sup> See Attach. 12 at 1; Attach. 13 at 1; Attach. 14 at 1; Attach. 15 at 1.

<sup>10</sup> See Attach. 12 at 5.

<sup>11</sup> See Attach. 12 at 5; Attach. 13 at 6; Attach. 14 at 7; Attach. 15 at 4.

(Attach. 16), photographs of the front and back of the booster (Attachs. 17 and 18), and a copy of the user manual that came with the device (Attach. 19). Again, Phonetone labelled its Band 66/4 Booster as a CSB. *See* Attach. 18.

As you can see, the Band 66/4 Booster is being marketed as a “Cell Phone Signal Booster for Home and Office – Band 66 & Band 4 Mobile Cellular Repeater Boosts 4G Data and Volte for Mobile Users Up to 4,500 SqFt. (1700/2100MHz).” Attach. 16 at 1. Phonetone describes its Band 66/4 Booster as follows:

**【Compatible With All US Networks】** - The booster supports All U.S. Carriers 4G LTE for Verizon, AT&T, T-mobile, Straight Talk, MetroPCS, Mint Mobile, Cricket etc, works with all cellular devices operating on band 66 and band 4. (1700/2100Mhz).<sup>12</sup>

Phonetone claims that its Band 66/4 Booster operates in band 66 and band 4, and Wilson found that the CSB will operate on the frequencies 1756-1780 MHz and 2156-2200 MHz, in addition to the AWS-1 frequencies. Because the Band 66/4 Booster does not comply with § 20.21(e)(3) of the Rules, it cannot be certificated.

The label on the back of the Band 66/4 Booster gives its FCC ID number as YYOANCP65. *See* Attach. 18. Attachment 20 is a copy of the Grant of Equipment Authorization issued to Phonetone for FCC ID YYOANCP65. The equipment authorization is valid only for a “Part 20 Industrial Booster (CMRS)” that operates on Cellular (824-829 MHz and 869-894 MHz) and Broadband PCS (1850-1910 MHz and 1930-1990 MHz). *See* Attach. 20. Obviously, the equipment authorization is not valid for Phonetone’s Band 66/4 Booster.

### Violations

Section 302(b) of the Act provides that “[n]o person shall manufacture, import, sell, offer for sale, or ship devices or home electronic equipment and systems, or use devices, which fail to comply with regulations promulgated pursuant to this section.” 47 U.S.C. § 302(b). Section 15.1(c) of the Rules in turn provides:

Unless specifically exempted, the operation or marketing of an intentional or unintentional radiator that is not in compliance with the administrative and technical provisions in this part, including prior equipment authorization, as appropriate, is prohibited under [§ 302 of the Act] and subpart I of part 2 of [the Rules].<sup>13</sup>

Furthermore, § 2.803(b) of the Rules states:

No person may market a radio frequency device unless: (1) For devices subject to authorization under certification, the device has been authorized in accordance with the rules in subpart J of this chapter and is properly identified and labeled as

---

<sup>12</sup> Attach. 16 at 1.

<sup>13</sup> 47 C.F.R. § 15.1(c).

required by § 2.925 and other relevant sections in this chapter.<sup>14</sup>

Marketing, as defined in § 2.803 of the Rules, “includes sale or lease, or offering for sale or lease, including advertising for sale or lease, or importation, shipment, or distribution for the purpose of selling or leasing or offering for sale or lease.” 47 C.F.R. § 2.803(a).

Finally, with respect specifically to CSBs, § 20.21(g) provides in pertinent part as follows:

... [N]o person, manufacturer, distributor, or retailer may market (as defined in § 2.803 of [the Rules]) any [CSB] that does not comply with the requirements of this section [20.21] to any person in the United States or to any person intending to operate the [CSB] within the United States. Wideband [CSB] may only be sold to members of the general public for their personal use.<sup>15</sup>

Clearly, Phonetone has willfully and repeatedly violated § 302(b) of the Act and §§ 2.803(b), 15.1(c), and 20.21(g) of the Rules by marketing CSBs that do not comply with § 20.21(e)(3) of the Rules, lack equipment authorization, and are improperly identified and labeled. And Amazon has run afoul of § 20.21(g) by advertising for sale Phonetone CSBs that do not comply with § 20.21(e)(3). Therefore, the Commission should issue an official citation to Amazon pursuant to § 503(b)(5) of the Act, 47 U.S.C. § 503(b)(5), for marketing the 7-Band Booster and the Band 66/4 Booster.<sup>16</sup>

In accordance with §§ 503(b)(2)(D) and 503(b)(4) of the Act, 47 U.S.C. §§ 503(b)(2)(D), (b)(4), the Commission should issue Phonetone a notice of apparent liability for forfeiture (“NALF”) for marketing its 7-Band Booster and the Band 66/4 Booster in violation of §§ 2.803(b), 15(c), and 20.21(g) of the Rules.<sup>17</sup> Imposing the maximum forfeiture penalty upon Phonetone is appropriate because its CSBs do not comply with the NPS and thus “pose tangible threats to the integrity of U.S. communications infrastructure.” *C.T.S. Technology Co., Limited*, 29 FCC Rcd. 8107, 8107 (2014). Moreover, Phonetone misled consumers by falsely claiming that its CSBs were approved by the Commission for consumer use. *See id.* (maximum penalty imposed on a Chinese company for falsely claiming that certain signal jammers had been approved for consumer use). *See also C.T.S. Technology Co., Limited*, 31 FCC Rcd. 6126, 6126 (2016) (Chinese manufacturer ordered to pay a maximum penalty of \$34,912,500 for marketing signal jamming devices to U.S. consumers). And the imposition of a maximum penalty on Phonetone should deter it (and other Chinese manufacturers) from continuing to flood this country with illegal CSBs.

---

<sup>14</sup> *Id.* § 2.803(b)(1).

<sup>15</sup> *Id.* § 20.21(g).

<sup>16</sup> Amazon was issued an official citation for selling analog-only TVs that did not display appropriate Consumer Alert disclosures required by 47 C.F.R. § 15.117(k). *See Amazon.com Inc.*, 22 FCC Rcd. 10298, 10298 (Enf. Bur. 2007).

<sup>17</sup> The maximum forfeiture that can be assessed under § 503(b)(2)(D) of the Act for a continuing rule violation is \$153,669. *See Amendment of § 1.80(b) of the Rules, Amendment of Civil Monetary Penalties to Reflect Inflation*, DA 19-1325, 2019 WL 7370226, at \*5 (Enf. Bur. Dec. 27, 2019).

Wilson respectfully requests that the Commission “aggressively address” the illegal marketing of CSBs to U.S. consumers over the Internet by Chinese retailers and manufacturers, such as Phonetone. *See C.T.S. Technology*, 29 FCC Rcd. at 8107. That effort should begin with the issuance of a NALF to Phonetone.

Finally, I refer you to the article <https://www.wired.com/story/unlicensed-signal-boosters-amazon/> which highlights the sale of unlawful Chinese boosters on Amazon.

I am filing a copy of this complaint in WT Docket No. 10-4, because it illustrates the need for the Commission to take action to extend the signal booster program at least to the 600 MHz and BRS/EBS bands. American manufacturers should be allowed to lawfully market CSBs that will operate in those spectrum bands.

Respectfully submitted,

*/s/ Russell D. Lukas*

Russell D. Lukas  
Attorney for Wilson Electronics, LLC

cc: Roger Noel  
Kathy Harris  
WT Docket No. 10-4